

What is claimed is:

1. A method for braking two wheels of a vehicle, in which the value of the brake pressure in the wheel-brake cylinder (804) allocated to the first wheel is linked with the value of the brake pressure in the wheel-brake cylinder (805) allocated to the second wheel,

wherein the linkage is given on the basis of the hydraulic pressure differentials ( $\Delta p_{\text{regulate}}$ ,  $\Delta p_{\text{control}}$ ) dropping at the respective intake valves (801, 803).

2. The method as recited in Claim 1,

wherein

- the desired pressure differential ( $\Delta p_{\text{control}}$ ) dropping at the second of the two intake valves (803) is ascertained from the dropping pressure differential ( $\Delta p_{\text{regulate}}$ ) at the first of the two intake valves (801),
- and from this, the coil current ( $i_{\text{control}}$ ) needed for generating the pressure differential ( $\Delta p_{\text{control}}$ ) at the second of the two intake valves (803) is ascertained.

3. The method as recited in Claim 2,

wherein

- the coil current ( $i_{\text{regulate}}$ ) through the first of the two intake valves (801) is ascertained, and
- from this, the pressure differential ( $\Delta p_{\text{regulate}}$ ) dropping at the first intake valve (801) is determined.

4. The method as recited in Claim 3,

wherein the pressure differential ( $\Delta p_{\text{regulate}}$ ) dropping at the first intake valve (801) is ascertained from the coil current ( $i_{\text{regulate}}$ ) by evaluating a characteristic curve.

5. The method as recited in Claim 2,

wherein the coil current ( $i_{\text{control}}$ ) is ascertained from a curve characterizing the second intake valve.

6. The method as recited in Claim 5,  
wherein the characteristic curve is a curve characterizing the correlation between the decreasing pressure differential ( $\Delta p_{\text{control}}$ ) and the coil current ( $i_{\text{control}}$ ).
7. The method as recited in Claim 1,  
wherein the linkage indicates a maximum value ( $p_{\text{diffmax}}$ ) for the difference between the pressure differentials ( $\Delta p_{\text{regulate}}$ ,  $\Delta p_{\text{control}}$ ) dropping at the respective intake valves.
8. The method as recited in Claim 1,  
wherein the linkage indicates the difference ( $p_{\text{diff}}$ ) between the pressure differentials ( $\Delta p_{\text{regulate}}$ ,  $\Delta p_{\text{control}}$ ) dropping at the respective intake valves.
9. The method as recited in Claim 8,  
wherein the difference ( $p_{\text{diff}}$ ) between the pressure differentials ( $\Delta p_{\text{regulate}}$ ,  $\Delta p_{\text{control}}$ ) dropping at the respective intake valves is a function of the existing driving condition and/or the time.
10. The method as recited in Claim 1,  
wherein the two wheels belong to the same axle.
11. A device for braking two wheels of a vehicle,  
- the device including wheel-brake cylinders allocated to the respective wheel  
and  
- the device including intake valves allocated to the respective wheel-brake cylinder,  
wherein logic means are provided which link the hydraulic pressure differentials ( $\Delta p_{\text{regulate}}$ ,  $\Delta p_{\text{control}}$ ) dropping at the respective intake valves.
12. The device as recited in Claim 11,  
wherein the logic means are designed so that the pressure differentials ( $\Delta p_{\text{regulate}}$ ,  $\Delta p_{\text{control}}$ ) are linked via a linkage of the coil currents through the respective intake valves.

13. The device as recited in Claim 11,  
wherein the intake valves are differential-pressure regulating valves.